

***FlyBy Math™* Alignment**  
**Hawaii Content and Performance Standards III: Mathematics**  
**Updated 9/28/05**

**Strand: Numbers and Operations**

**Standard 1. NUMBER SENSE:**

Understand numbers, ways of representing numbers, relationships among numbers, and number systems

**Topic and Benchmark**

*Numbers and Number Systems*

MA.7.1.1 Solve problems using fractions, decimals, and percents.

***FlyBy Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

**Standard 3. COMPUTATION STRATEGIES:**

Use computational tools and strategies fluently and, when appropriate, use estimation

**Topic and Benchmark**

*Estimation*

MA.7.3.2 Determine the reasonableness of a solution by comparing the answer to an estimate

***FlyBy Math™* Activities**

--Predict outcomes and explain results of mathematical models and experiments.

**Strand: Patterns, Functions, and Algebra**

**Standard 10: SYMBOLIC REPRESENTATION:**

Use symbolic forms to represent, model, and analyze mathematical situations

**Topic and Benchmark**

*Numeric and Algebraic Representations*

MA.7.10.1 Analyze the relationship among tables, graphs (including graphing technology when available), and equations of linear functions, paying particular attention to the meaning of intercept and slope

***FlyBy Math™* Activities**

--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

--Interpret the slope of a line in the context of a distance-rate-time problem.

*Numeric and Algebraic Representations*

MA.7.10.2 Use symbolic algebra to represent situations involving linear relationships

--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

## Strand: Data Analysis, Statistics, and Probability

### Standard 11: FLUENCY WITH DATA:

Pose questions and collect, organize, and represent data to answer those questions

#### Topic and Benchmark

##### *Data Collection and Representation*

MA.7.11.1 Design a study, collect data, and select the appropriate representation (line graph, bar graph, circle graph, histogram, stem and leaf plot, box and whisker plot) to display the data

#### ***FlyBy Math™* Activities**

--Conduct simulation and measurement for several aircraft conflict problems.

--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.